

## CLAIMS:

## 1. Solid bowl helical conveyor centrifuge, comprising

- a rotatable drum (3) having a particularly horizontally oriented axis of rotation,
- a rotatable worm (5) arranged in the drum (3),
- at least one discharge opening (17) oriented at an angle with respect to the axis of rotation of the solid bowl helical conveyor centrifuge, for discharging solids from the drum (3) in the shell of the drum (3),

- an adjusting device being assigned to the at least one discharge opening (17), by means of which adjusting device the outlet cross-section for the solids can be changed,

- in addition, the adjusting device having a movable adjusting disk (25) arranged in the drum (3) as an extension of the worm (5), which adjusting disk (25) is non-rotatably connected with the drum (3), the worm (5) or the worm body (29), characterized in that

- at least one or more connecting rod(s) (27) is/are fastened to the adjusting disk (25).

## 2. Solid bowl helical conveyor centrifuge according to Claim 1,

characterized in that the discharge openings (17) in the drum shell extend radially to the outside.

3. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the end of the connecting rod (27) facing away from the adjusting disk (25) is directly or indirectly connected with a rod (35) or a pipe which centrically penetrates an inlet pipe (7) in the axis of rotation of the solid bowl helical conveyor centrifuge.

4. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the at least one or more connecting rods (27) are guided through the worm (5) from the end of the drum (3) situated opposite a drive of the helical conveyor centrifuge.

5. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the end of the connecting rod (27) facing away from the adjusting disk

(25) is fastened to a ring (31) which is disposed by means of a bearing (33) on a rod (35) which centrically penetrates an inlet pipe (7) in the axis of rotation of the solid bowl helical conveyor centrifuge.

6. Solid bowl helical conveyor centrifuge according to the one preceding claims, characterized in that the adjusting disk (25) is oriented radially with respect to the axis of rotation.

7. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the adjusting disk (25) is arranged as an axial extension of the drum end in a discharge chamber (15) axially adjoining the worm.

8. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the adjusting disk (25) is axially displaceable in the drum (3).

9. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the adjusting disk (25) has a swivellable construction.

10. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the adjusting disk (25) is swivellably linked to the axial worm end.

11. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that three connecting rods (27) are fastened to the adjusting disk (25).

12. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the connecting rods (27) penetrate the axial end of the worm body (29) or a worm drive shaft (41) of the worm (5) into a chamber (28) in the worm body (29).

13. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the at least one or more connecting rods (27) are guided from the cylindrical end of the drum (3) through the worm (5).

14. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the chamber (28) adjoins the distributor.

15. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the adjusting disk (25) can be adjusted by means of an electromotively operable adjusting unit.

16. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the adjusting disk (25) can be adjusted by means of a hydraulic or pneumatic device.

17. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the connecting rod can be operated by means of the electromotively operable adjusting unit or the hydraulic device.

18. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the ring (31) is constructed as a sliding element (39) which can be operated by a fluid.

19. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that a pipe (37) penetrating the inlet pipe (7) for the centrifuged material leads into a chamber (28) used as a feeding and removing device for the operating fluid.

20. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the adjusting disk has recesses.

21. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the inlet pipe (7) does not rotate along with the worm (5).

22. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the inlet pipe (7) rotates along with the worm (5).

23. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized in that the inlet pipe (7) rotates along with the worm (5). (? same as Claim 22 - translator).

24. Solid bowl helical conveyor centrifuge according to one of the preceding claims, characterized by a computer-controlled control device for controlling the adjusting disk, particularly as a function of the dry substance content of the solids.